PROPELLER VISUAL INSPECTION

HUB DATA *(Record Blade Palm Data for CP Propellers)*

SERIAL NO.	STOCK NO.
DRAWING NO.	REV. _____ Hub _____ Dwg
MFG. BY	
MATERIAL	NO. OF BLADES
___ PORT ___ STBD ___ CENTER ___ INBOARD ___ OUTBOARD ___ RH ___ LH	STRESS RELIEF/MODIFICATION DATA AND DATE *(if any)*
ACTIVITY WHERE LAST REPAIRED	DATE OF LAST REPAIR

INSPECTION

SIGNATURE & TITLE OF QUALIFIED INSPECTOR	INSPECTING ACTIVITY
LOCATION OF INSPECTION (ACTIVITY)	DATE OF INSPECTION

INSTRUCTIONS

1. Utilize this form by placing a check mark in the appropriate column – YES, NO or NA (not applicable).
2. Answer all questions and record all defects. Use item 15 if more space is needed.
3. If an answer indicates the possibility of an unsatisfactory propeller, explain in the REMARKS column.
4. Show the approximate size and location of all defects and damage on the appropriate attached sketch. Identify damaged areas as old or new, if possible.
5. For Visual Preservation Inspection respond to items 1 and 10 through 15.
6. For Visual Technical Inspection refer to the applicable drawing and respond to items 2 through 15.

ITEM	YES	NO	NA	REMARKS
1. Preservation				
a. Is propeller stored in open covered storage or better?				
b. Is propeller preserved with strippable plastic coating?				
c. Is plastic coating free of damage or deficiencies (e.g., not torn, no bare spots, peeling, porous, etc.)?				
d. Is propeller preserved with corrosion-preventive compound instead of strippable plastic coating?				
e. Are sheet metal blade edge protectors installed?				
f. Is there canvas or equivalent protection between blade edges and blade edge protectors?				
g. Are blade edge protectors free of damage?				
h. Are forward and aft faces of hub protected?				
i. Are ends of the hub bore sealed?				
2. Are the following accessories installed or accompanying this propeller?				
a. Gland ring				
b. Eyebolts				
c. Eyebolt hole plugs				
d. Fill and vent hole plugs				
e. Gland and cap studs				
f. Gland and cap nuts				

ITEM	YES	NO	NA	REMARKS
3. Prairie System a. Are all air-emitting holes open?				
b. Are the air channel cover plate welds free of cracks or porosity?				
c. On prairie propellers having an external air seal arrangement at the forward end, is the air seal housing free of hub grooves or damage?				
4. Blade Edges a. Does the latest revision of the propeller drawing specify a trailing-edge knuckle?				
- Do the trailing edges have knuckles?				
- Is the break of the knuckle sharp on all blades?				
b. Does the latest revision of the propeller drawing specify a trailing-edge fairing radius?				
- Do the trailing edges have fairing radii?				
c. Does the latest revision of the propeller specify a knuckle on the blade tip?				
- Do the tips have knuckles?				
- Is the break of the knuckle sharp on all blades?				
d. Does the latest revision of the propeller drawing specify a tip fairing radius?				
- Do the blades have tip fairing radii?				
e. Do the trailing edges and tips have an edge radius of approximately 1/64"?				

ITEM	YES	NO	NA	REMARKS
f. Are leading edges, trailing edges, and tips free from damage or deficiencies (e.g., nicks, dents, bends, cable marks, flat spots, ridges, punch marks, gouges, etc.)?				
g. Are leading- or trailing-edge outlines fair (not wavy)?				
h. Are the blade edges free of cracks within 10% of blade width from the edge? (Identify location of cracks as being in welded or unwelded areas.)				
i. Are the blade edges free of porosity within 10% of blade width from the edge? (Identify location of porosity as being in welded or unwelded areas.)				
5. Blade Surfaces a. Are blade surfaces free of damage or deficiencies (e.g., dents, gouges, cable marks, etc.)?				
b. Are the blade surfaces free of cavitation erosion?				
c. Are blade surfaces fair (not wavy)?				
d. Are the blade surfaces free of all cracks? (Identify location of cracks as being in welded or unwelded areas.)				
e. Are the blade surfaces free of all porosity? (Identify location of porosity as being in welded or unwelded areas.)				

ITEM	YES	NO	NA	REMARKS
6. Fillet Areas a. Are fillet areas free of damage or deficiencies (e.g., dents, gouges, ridges, cable marks, etc.)?				
b. Are the fillet areas free of cavitation erosion?				
c. Are fillets fair (not wavy)?				
d. Are the fillet areas free of cracks? (Identify location of cracks as being in welded or unwelded areas.)				
e. Are the fillet areas free of porosity? (Identify location of porosity as being in welded or unwelded areas.)				
7. Hub a. Is the hub exterior surface free of damage or deficiencies (e.g., dents, gouges, cable marks, etc.)?				
b. Is the hub exterior surface free of cavitation erosion?				
c. Is the hub bore (excluding keyways) free of damage or deficiencies (e.g., gouges, scoring, upset, etc.)?				
d. Are keyway(s) free of damage or deficiencies (e.g., nicks dents, etc.)?				
e. Is the gland seal area at forward end of hub bore free of damage or deficiencies (e.g., gouges, scoring, etc.)?				
f. Is O-ring sealing surface on hub aft face free of damage or deficiencies?				
g. Are the hub interior or exterior surfaces free of cracks?				

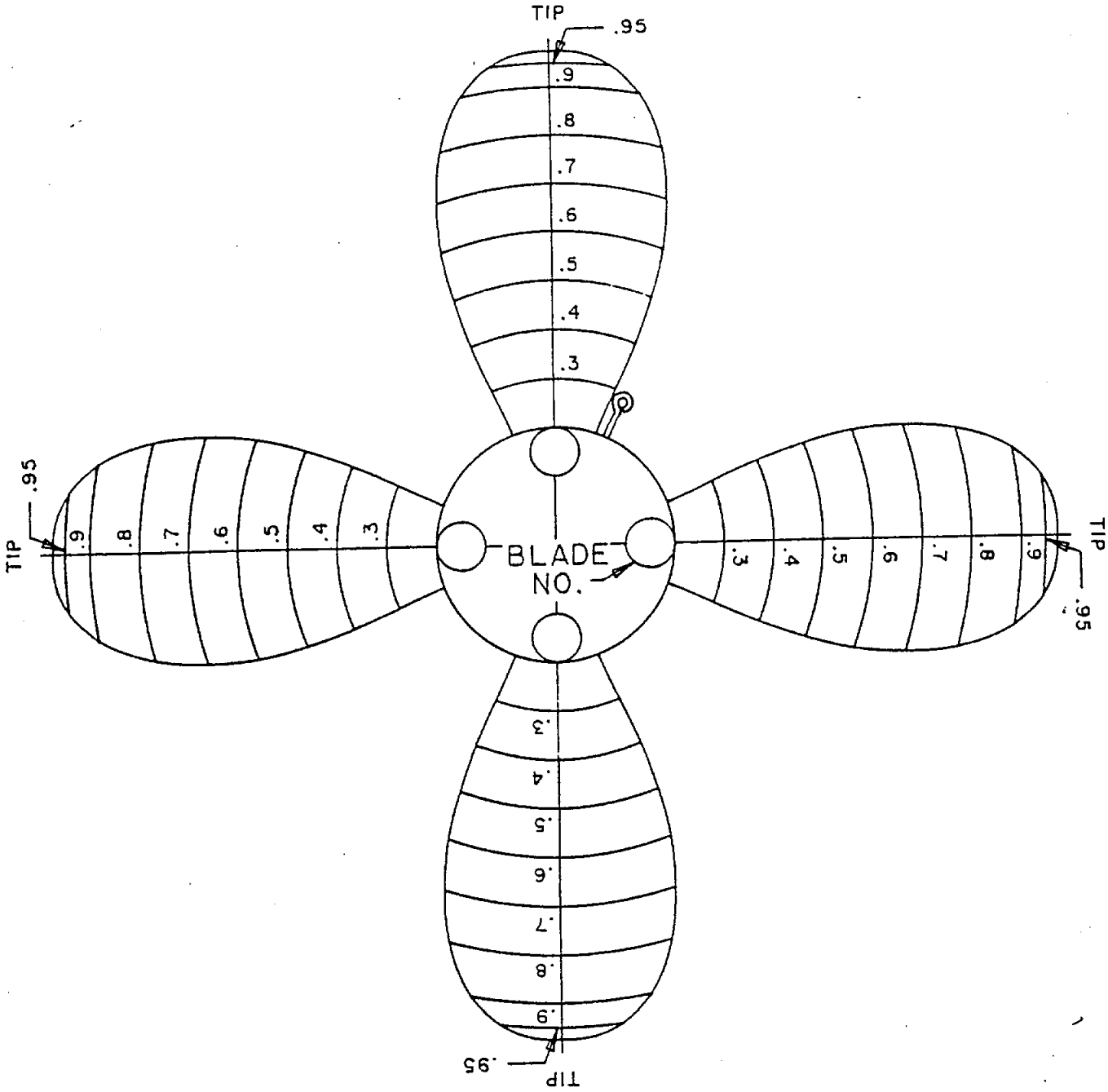
Propeller Serial No: _____

ITEM	YES	NO	NA	REMARKS
h. Are the hub interior or exterior surfaces free of porosity?				
i. Are all installed lifting eyebolts, and fill and vent plugs flush with the adjacent surface?				
8. Is propeller free of marine growth?				
9. Is surface finish per requirements?				
- Is the hub surface 125 rms or better?				
- Is the blade surface 63 rms or better? (class I & II)				
- Is the blade surface 125 rms or better? (class III & IV)				
10. Are the approximate size and location of all defects and damage shown on the attached sketches?				
11. Is a photograph of the damaged areas and/or entire propeller available? (Note in the REMARKS column if it is attached.)				
12. Is the certification document attached to the propeller? (If available, record activity, inspector, and date in REMARKS column.)				
13. Does the condition of this propeller indicate that it will provide satisfactory service?				

14. Provide a brief description of the repairs considered necessary to restore this propeller to a serviceable condition.

Propeller Serial No: _____

15. Additional Comments.



☐ PRESSURE FACE

☐ SUCTION FACE

NOTE: THIS FORM IS USED FOR SURFACE CONDITION (POROSITY, WELD REPAIRS, etc.).

PROPELLER SERIAL NO.: _____